

CLAIMS:

1. A curable composition for tendons for prestressed concrete, which is applied to the surface of a tendon for prestressed concrete, said curable composition comprising at least an epoxy resin and a moisture-curing type curing agent, wherein the tensioning-permitting time L at 90°C, which is expressed by the time required until the viscosity of the curable composition as measured at 25°C at the time when the curable composition has been left to stand under environment of 90°C and 60% in relative humidity reaches 10,000 poises, and the number of days M required to cure at normal temperature, which is expressed by days required until the type D Durometer hardness of the curable composition as measured in accordance with JIS K 7215 at the time when the curable composition has been left to stand at 25°C reaches 60, satisfy the respective relationships represented by the following expressions (1) and (2):

$$\begin{aligned} 20 \quad & \mathbf{L} \text{ (hours)} \geq 20 & (1) \\ & \mathbf{M} \text{ (days)} \leq 1095 & (2). \end{aligned}$$

2. The curable composition for tendons for prestressed concrete according to Claim 1, wherein the epoxy resin is at least one liquid epoxy resin selected from the group consisting of bisphenol A type epoxy resins and bisphenol F type epoxy resins.

3. The curable composition for tendons for prestressed concrete according to Claim 1, wherein the moisture-curing type curing agent is a ketimine compound.

5 4. The curable composition for tendons for prestressed concrete according to Claim 3, wherein the ketimine compound is a compound formed by a dehydration-condensation reaction of an amine compound with a carbonyl compound.

10 5. The curable composition for tendons for prestressed concrete according to Claim 1, which comprises the moisture-curing type curing agent in a proportion of 1 to 16.5 parts by weight per 100 parts by weight of the
15 epoxy resin.

 6. The curable composition for tendons for prestressed concrete according to Claim 1, which further comprises an alcohol, a phenol or a mixture thereof.

20 7. The curable composition for tendons for prestressed concrete according to Claim 6, which comprises the alcohol, the phenol or the mixture thereof in a proportion of 0.1 to 30 parts by weight per 100 parts by
25 weight of the epoxy resin.

 8. The curable composition for tendons for

prestressed concrete according to Claim 6, which comprises the moisture-curing type curing agent in a proportion of 0.3 to 13 parts by weight per 100 parts by weight of the epoxy resin.

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9. The curable composition for tendons for prestressed concrete according to Claim 1, which further comprises a dehydrating agent.

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10. The curable composition for tendons for prestressed concrete according to Claim 9, wherein the dehydrating agent is calcium oxide, a water-absorbing polymer, a molecular sieve, a silane coupling agent or a mixture thereof.

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11. The curable composition for tendons for prestressed concrete according to Claim 9, which comprises the dehydrating agent in a proportion of 0.1 to 200 parts by weight per 100 parts by weight of the epoxy resin.

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12. The curable composition for tendons for prestressed concrete according to Claim 1, which further comprises at least one curing auxiliary selected from the group consisting of curing accelerators and latent curing agents.

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13. The curable composition for tendons for

prestressed concrete according to Claim 12, wherein the curing accelerator is a tertiary amine compound, an imidazole compound, a BF_3 complex or a mixture thereof.

5 14. The curable composition for tendons for prestressed concrete according to Claim 12, wherein the latent curing agent is a dicyandiamide, a dihydrazide, an amine adduct, a diaminomaleonitrile or a mixture thereof.

10 15. The curable composition for tendons for prestressed concrete according to Claim 12, which comprises the latent curing agent in a proportion of at most 10 g to the weight of the epoxy resin containing 1 g equivalent weight of an epoxy group.

15 16. The curable composition for tendons for prestressed concrete according to Claim 12, which comprises the curing accelerator in a proportion of at most 1 g to the weight of the epoxy resin containing 1 g equivalent
20 weight of an epoxy group.

 17. The curable composition for tendons for prestressed concrete according to Claim 1, which further comprises a thickener.

25 18. The curable composition for tendons for prestressed concrete according to Claim 1, which is a

curable composition applied to the surface of a tendon for prestressed concrete, which is covered with a sheath.

19. A sheath-covered tendon for prestressed concrete
5 having a structure that a curable composition is applied to the surface of a tendon for prestressed concrete, and the coated surface thereof is covered with a sheath, wherein the curable composition comprises at least an epoxy resin and a moisture-curing type curing agent, wherein the
10 tensioning-permitting time L at 90°C, which is expressed by the time required until the viscosity of the curable composition as measured at 25°C at the time when the curable composition has been left to stand under environment of 90°C and 60% in relative humidity reaches
15 10,000 poises, and the number of days M required to cure at normal temperature, which is expressed by days required until the type D Durometer hardness of the curable composition as measured in accordance with JIS K 7215 at the time when the curable composition has been left to
20 stand at 25°C reaches 60, satisfy the respective relationships represented by the following expressions (1) and (2):

$$L \text{ (hours)} \geq 20 \quad (1)$$

$$M \text{ (days)} \leq 1095 \quad (2).$$